IDAHO
DEPARTMENT OF FISH AND GAME

Jerry M. Conley, Director

HAGERMAN HATCHERY

Annual Report

1 October 1983 - 30 September 1984

by

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ABSTRACT

The objective of Hagerman Hatchery was to raise 3,250,000 rainbow, Kamloops, cutthroat, brown trout and fall chinook salmon for streams, lakes and reservoirs throughout Idaho.

The hatchery planted or transferred 3,290,940 fish of the above species weighing 536,044 pounds.

It took 931,710 pounds of feed with a conversion of 1.73 pounds of feed to produce a pound of fish. The total expenditure for the year excluding capital outlay was $351,682.71. The cost per pound of fish produced was $0.66.

Author:

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Fish Hatchery Superintendent Ill

OBJECTIVES

The objectives of Hagerman Hatchery were:

1. To raise 3,250,000 rainbow, Kamloops, cutthroat, brown trout and fall chinook salmon of all sizes for streams, lakes and reservoirs throughout Idaho.

2. To assist in increasing or maintaining harvest levels and populations of these species for fishing or recreational use in all waters of the state.

INTRODUCTION

Hagerman Hatchery is located in South Central Idaho in Gooding County in the Hagerman Valley.

The water supply comes from Tucker Springs and Riley Creek and requires 115 cfs of water to operate at full capacity.

The hatchery facilities include 24 raceways, 570 feet long, varying in width from 6 feet to 15 feet. There are 18 fingerling raceways, 2 1/2 feet x 100 feet, and 28 cement vats in the incubation building, 3 feet x 15 feet.

The hatchery is capable of rearing 500,000 pounds of salmonids with the present stocking schedule.

FISH HEALTH

The main disease problems this year were the virus diseases of infectious pancreatic necrosis (IPN) and infectious hemopoetic necrosis (IHN) causing a loss of 400,000 fish. There is no known treatment but thinning of the fish helps.

A recurring disease that was present in mostly the larger, longer raceways was bacterial gill disease, causing mortalities of 150,000 fish. The treatment for this disease was either Chloramine T or the combination of cutrine and benzylalkonium chloride.

A loss of eggs and fish was encountered in the hatchery incubation building. The first loss was a problem of coagulated egg sac in the sac fry. While the fish were small, they contracted the protozoan Costia. The losses sustained by these two problems were approximately 250,000 fish. The unseen losses of eggs and fry were sometimes caused by discrepancies in counting and measuring. The treatment for Costia consisted of Chloramine T or Formalin.

Some minor problems were caused by Gyrodactylus, Epistylis and Trichodina causing a loss of 100,000 fish. -

One incidence of disease that was not present to any extent before was columnaris. This caused a loss of 25,000 small fingerling Kamloops. A three percent salt treatment eliminated the problem.

Again this year, the ever present bird populations of seagulls, night herons, blue herons, kingfishers and ducks brought on the unseen loss of 200,000 fish. During the summer, the overhead bird wires were completed, and the seagull problem slowed considerably. The fall and winter arrival of ducks caused some problems as they either walked or flew under the wires and ate some of the smaller fish.

Proliferative kidney disease was still present in some of the fish reared in Riley Creek water. Whether the transferring of this disease was by seagulls or other birds is still not entirely decided, but the fish contracted the disease in the raceways that were fed by Riley Creek water and before the bird wires were completed on that section of raceways. Very little loss was attributed to PKD.

FISH TRANSFERS

Table 1 includes all transfers from Hagerman Hatchery to other stations.

FISH RELEASES

The following are total fish planted in the different regions of the state from the Hagerman Hatchery:

Region 1

Rainbow trout - 80,000 -- 26,200 pounds
Kamloops trout - 290,730 -- 7,500 pounds

Region 2

Rainbow trout - 173,405 -- 54,550 pounds

Region 3

Rainbow trout - 295,445 -- 72,450 pounds
Kamloops trout - 101,272 -- 7,125 pounds

Region 3

Rainbow trout - 928,642 -- 126,132 pounds
Kamloops trout - 362,622 -- 8,630 pounds
Cutthroat trout - 32,342 -- 2,870 pounds
Brown trout - 165,125 -- 3,325 pounds
Fall chinook salmon - 16,692 -- 529 pounds

Region 5

Rainbow trout - 246,925 -- 76,650 pounds

Region 6

Rainbow trout - 299,289 -- 94,165 pounds
Kamloops trout - 112,820 -- 6,250 pounds

SPAWNTAKING OPERATIONS

Hagerman Hatchery personnel were involved in the installation and removal of the kokanee salmon trap on the South Fork Boise River near Pine. The fish that were trapped were taken to Eagle Hatchery for spawning.

FISH PRODUCTION

Rainbow Trout

Rainbow trout was the primary species reared at the Hagerman Hatchery. At the start of the year there were 1,613,978 fish weighing 54,350 pounds, and the year ended with 905,257 fish weighing 62,457 pounds.

The hatchery received 3,293,990 eggs from Trout Lodge (Washington), Hayspur (IF&G), Mount Lassen (California) and Ennis (NFH, Montana).

Cutthroat Trout

Twenty-two thousand, fifty (22,050) fine-spot cutthroat trout were received from Grace Hatchery and of these, the hatchery planted 24,643 fish weighing 1,770 pounds.

Fall Chinook Salmon

Thirty-five thousand, one hundred and seventy-five (35,175) fall chinook salmon were received from Mackay Hatchery, and 16,692 fish weighing 529 pounds were stocked.

Steelhead

A small number of steelhead trout were transferred to the Hagerman State Hatchery from the Hagerman National Hatchery for observation concerning PKD and other diseases, and of the original number of 4,642 fish received, the hatchery planted 2,694 after the project was completed.

Table 1. Fish transfers from Hagerman Hatchery.

Date	Species	Station Receiving	Number	Pounds	Size at release
5/8/84	Rainbow	Mackay	7,500	3,000	9-11"
5/22/84	Rainbow	Mackay	6,300	3,000	10-11"
6/4/84	Rainbow	Mackay	8,700	3,000	9-10"
6/11/84	Rainbow	Kamiah	9,900	3,000	9-10"
6/28/84	Rainbow	Mackay	22,050	6,300	8-10"
7/9/84	Rainbow	Mackay	7,560	2,700	9-10"
7/9/84	Rainbow	Kamiah	10,500	3,000	8-10"
7/24/84	Rainbow	Mackay	32,900	7,000	7-9"
	Total		105,410	31,000	

One million, eight hundred and seven thousand, five hundred and eighty-nine (1,807,589) fish weighing 453,678 pounds were stocked in waters of the state, and 105,410 fish weighing 31,000 pounds were transferred to Mackay and Kamiah hatcheries for redistribution. Also, Hayspur Hatchery transferred 162,438 rainbow to Hagerman, and 147,526 of these fish were planted.

Kamloops Trout

One million, four hundred and twenty-six thousand, eight hundred and seventy-eight (1,426,878) eggs were received from Trout Lodge. Of these, the hatchery stocked 1,021,231 fish weighing 32,915 pounds.

Brown Trout

Hagerman Hatchery received 203,902 small fingerlings from Grace Hatchery and planted 129,500 fish weighing 2,175 pounds.

The hatchery also received 45,000 browns from Mackay Hatchery and planted 35,625 fish weighing 1,150 pounds.

FISH FEED UTILIZED

The fish feed used by Hagerman Hatchery was produced by Rangens, Inc., Buhl, Idaho.

Fish feed utilized:

Size	Pounds	Cost
Swim-up	650	171.79
No. 1	3,350	878.90
No. 2	10,000	2,675.80
No. 3	31,200	8,400.98
No. 4	84,489	17,987.02
Coarse Crumbles	88,806	18,955.79
4/32	711,965	131,941.28
5/32	1,250	252.88

Total number of pounds of feed - 931,710.
Cost of the feed - $181,264.44.
Number of pounds of fish produced - 536,044.
Cost per pound of fish produced - $0.66.

HATCHERY IMPROVEMENTS

The major improvement this year was the completion of the overhead bird wires on the larger raceways.

New asphalt shingles were put on the residences and garages.

SPECIAL STUDIES

A change of the study reservoir involving four strains of trout was instituted from Magic Reservoir to Anderson Ranch Reservoir. The four strains of fish were selected and marked with fluorescent grit and were stocked at Deer Creek Landing in the upper Anderson Ranch Reservoir. The four strains were 147,526 Hayspur rainbow, 104,020 Mount Lassen rainbow, 116,971 Kamloops and 107,892 Shasta rainbow fingerlings.

MISCELLANEOUS ACTIVITIES

The hatchery personnel assisted with upland game bird patrol.

A number of high school and grade school classes were given tours of the hatchery.

Approximately 44,000 people visited the hatchery during the year. Their activities included looking, fishing and hunting on the hatchery or wildlife management area.

ACKNOWLEDGEMENTS

Hatchery staffing during the year included:

Bud Ainsworth, Fish Hatchery Superintendent Ill; Fenton Hays, Fish Hatchery Superintendent II; Paul Smith, Fish Culturist; Doug Anderson, Fish Culturist; David May, Fish Culturist; Bryce DeGiulio, Bio-aide; Larry Barrett, Bio-aide; Kenny James, Bio-aide; Fish Transport Operators Bill Fiscus and Ralph Taylor; YCC Crew of seven for eight weeks (Melanie Mecham, Amy Pugmire, Toni Olney, Jayna Millican, Sam Bruhn, Mike Humbach and Rick Scruggs); Shauna Tackmen, Crew Leader for YCC Crew and two JTPA high school age employees (Jan Peterson and Nick Barnes).